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EXAMINER

COLE, LAURA C

ART UNIT	PAPER NUMBER
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1744

DATE MAILED: 07/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/831,783

Applicant(s)

MCKENZIE ET AL.

Examiner

Laura C Cole

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 17 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 33-39 and 41-60 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 33-39 and 41-60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the retaining means for removably retaining tableware (Claims 59-60) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 33-39, 41-46, and 51-58 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 33, 43, 51, and 59 require that the device being "ultrasonic". "Ultrasonic" is defined as "Of or relating to acoustic frequencies above the range audible to the human ear, or above approximately 20,000 hertz" according to *The American Heritage® Dictionary of the English Language, Fourth Edition Copyright © 2000 by Houghton Mifflin Company*. It is unclear as to how the claimed device can be considered to be ultrasonic and have an average oscillating frequency of from about 1000 Hz to about 100 kHz.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 59-60 are rejected under 35 U.S.C. 102(b) as being anticipated by FR 1 102 562 (herein referred to as '562).

'562 displays an ultrasonic cleaning device comprising a housing, gripping means, retaining means for removably retaining tableware, a transducer means mounted in housing for oscillating at an ultrasonic frequency, and power supply means for supplying current to the transducer, and that the housing can be at least partially immersed in an aqueous environment (See English Explanation provided in the IDS of 23 January 2003, Figures 1 and 2 the housing is represented at (3), a retaining means for retaining the tableware (tableware shown as (6)), a transducer means (wherein a transducer is defined as "a device that converts input energy of one form to an output energy of a different form" (The American Heritage® Dictionary of the English Language, Fourth Edition, Copyright © 2000 by Houghton Mifflin Company)) is mentioned as the vibrator relies upon or is *interdependent* of the electromagnetic body (see Exhibit A which is a translation of Column 2 Lines 16-18) so therefore the energy must be converted or transduced, a power supply means (electromagnetically), and that the housing can be immersed in an aqueous environment (as shown in Figures 1-2.)

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

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were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 33-35 and 39 are rejected under 35 U.S.C. 103(a) as obvious over Sharp, USPN 5,297,512.

Sharp discloses a vibrating and ultrasonic sound emitting grooming device that comprises a housing (Figure 1), a gripping means (Figure 1 (19)), a cleaning head (Figure 1) that is adapted to be removably mounted to the housing (Column 2 Lines 35-41), a transducer means mounted in the housing for oscillating (Figure 1 (40)), and a power supply means which is mounted in the housing (Figure 1 (46)). The gripping means is at a proximal end while the cleaning head is at a distal end (Figure 1). The cleaning head is in the form of bristles (Figure 1(28)). The transducer means has a frequency of 30 kHz (Column 3 Line 9). The average oscillating frequency is 30 kHz (Column 3 Line 9), which falls into the range of 1000 Hz to 100 kHz. Sharp does not disclose having a cleaning head surface area greater than 6.25 cm<sup>2</sup>, however Figure 1 indicates a finger defining a scale for the size of the device indicating that the area is greater than 6.25 cm<sup>2</sup>.

It would have been obvious to one of ordinary skill in the art to construct a cleaning head for a sonic surface cleaner that is used for cleaning a pet's coat to have a cleaning head surface area greater than 6.25 cm<sup>2</sup> because it would be desirable to

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have a larger cleaning surface area to reduce the time it takes to clean an area, to reduce the human effort in cleaning a large surface, and because it is most efficient for cleaning a large area. Furthermore, MPEP 2144.04 IV A states "In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device."

5. Claims 33-35, 39, 42-44, 47, 49, 51, and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Center, USPN 5,311,632.

Center discloses an ultrasonic plaque removal device that comprises a housing (Figure 1 (22)), a gripping means (Figure 1 (12)), a cleaning head (Figure 2 (26)) that is adapted to be removably mounted to the housing (Figure 2; Column 3 Lines 57-60), a transducer means mounted in the housing for oscillating (Figure 2 (48); Column 3 Lines 61-67), and a power supply means which is mounted in the housing (Figure 2 (20)).

The gripping means is at a proximal end while the cleaning head is at a distal end (Figures 1-3). The cleaning head is in the form of bristles (Figure 2 (26)). The device is adapted to function while partially immersed in an aqueous environment (Column 4 Lines 3-15). There is first and second housings, with the second housing comprises a transducer (Figure 2, the portion on the left split from (18)) and the first portion (Figure 2 (18)) that contains the power supply means. The device is used in a method that

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contacts a soil with a cleaning composition and then contacting the soil with the cleaning head of the device by imparting ultrasonic energy (Column 4 Lines 3-7). The cleaning composition that is disclosed is a plaque softener or tooth polishing liquid or gel (Column 4 Lines 3-7.) The device is ultrasonic (see title) and has an oscillating frequency of *about* 100kHz, (10-20MHz, Column 3 Lines 61-63). Center does not disclose having a cleaning head surface area greater than 6.25 cm<sup>2</sup>.

It would have been obvious to one of ordinary skill in the art to have a cleaning head surface area greater than 6.25 cm<sup>2</sup>. Applicant has not disclosed that having a cleaning head surface area greater than 6.25 cm<sup>2</sup> provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with cleaning soiled food off of a surface since it cleans soiled food from teeth. Furthermore, MPEP 2144.04 IV A states "In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device."

6. Claims 33-35, 36, 38-39, 41-51, and 55 are rejected under 35 U.S.C. 103(a) as obvious over Sawyer, USPN 3,357,033.

Sawyer discloses a sonic surface cleaner that comprises a housing (Figures 1-3), a gripping means (Figure 1 (12)), a cleaning head (Figures 1-3 (30)) that is adapted to



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be removably mounted to the housing (Column 2 Lines 52-57), a transducer means mounted in the housing for oscillating (Column 4 Lines 17-22 disclose that the energy generated is "transformed" into sound waves and releases that energy at the surface as sonic Column 4 Lines 22-36) that is of a frequency from about 1000 Hz to about 100 kHz in that the wave energy is in the lower sonic range and is analogous to "ultrasonic" wave energy (Column 4 Lines 51-72) and that the sonic range ("sonic" is defined as "of or relating to audible sound" according to *The American Heritage® Dictionary of the English Language, Fourth Edition Copyright © 2000 by Houghton Mifflin Company*) and that the audible sound range is in a range of 20 Hz to 20 kHz (according to <http://www.avroomservice.com/glossary/index.htm>) and a power supply means (from wires (55) and (56) that lead to a cap (60), Column 3 Lines 10-18, and by Figure 1 appear to connect to a cord that would go to an outlet.) The gripping means is at a proximal end while the cleaning head is at a distal end (Figure 1). The device further comprises at least one solution storage means (Figure 1 (72) that contains a cleaning composition for cleaning, and a dispensing means (Figure 1 (71)) mounted in the housing for supplying the cleaning composition (Column 3 Lines 22-32). The cleaning head may be a sponge (Figure 3) so that the cleaning liquid is supplied to a surface that is coterminous (Figure 2) with the head in that the absorbent sponge portions disperse the liquid. The "second" housing is the housing labeled (11) in Figures 1-3 wherein the "first" housing is the liquid supply (Figure 1 (72)). Sawyer also discloses a method for removing soil from a hard surface that contacts the soil with a liquid and cleaning head and imparting ultrasonic energy to it (Column 4 Line 73 to Column 5 Line 18 states that

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a cleaning composition or detergent is put into contact with a soil, then loosening the soil, and then rinsing the amount with water.) Sawyer does not disclose having a cleaning head surface area greater than  $6.25 \text{ cm}^2$  or having a power output of at least  $0.02 \text{ watts/cm}^3$ .

It would have been obvious to one of ordinary skill in the art to construct a cleaning head for a sonic surface cleaner that is used for a floor to have a cleaning head surface area greater than  $6.25 \text{ cm}^2$  or having a power output of at least  $0.02 \text{ watts/cm}^3$  because it would be desirable to have a larger cleaning surface area to reduce the time it takes to clean an area, to reduce the human effort in cleaning a large surface, and because it is most efficient for cleaning a large area. Furthermore, MPEP 2144.04 IV A states "In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device."

7. Claims 33-37, 39, 42-49, 51, 52, 55, and 56 are rejected under 35 U.S.C. 103(a) as obvious over Hoffman, USPN 5,890,249 in view of Center, USPN 5,311,632.

Hoffman discloses a multi-purpose vibration cleaning device that comprises a housing (Figures 1-5), a gripping means (Figure 1 (12)), a cleaning head (Figures 1-3 (26) or (24)) that is adapted to be removably mounted to the housing (Column 2 Lines 56-57), a transducer means mounted in the housing for oscillating (Column 2 Lines 9-11

disclose that the power supply is connected to the vibration generator, and through that the type of energy must be converted or “transduced” from the battery to the output vibrations), and a power supply means which is mounted in the housing (Figure 1 (17)). The gripping means is at a proximal end while the cleaning head is at a distal end (Figure 1). The device further comprises a solution storage means for containing a cleaning composition and a dispensing means (Column 2 Lines 56-63.) The cleaning composition is lye (Column 2 Line 59) wherein lye is a process aid, antibacterial agent, a surfactant, “perfume”, anti-microbial agent, etc. The cleaning head may take the form of a brush, cloth, or towel (Column 2 Lines 45-55, Column 3 Lines 10-19) and can be at least partially immersed in an aqueous environment (Column 2 Lines 12-13). The “second” housing is the housing mentioned above wherein the “first” housing is the housing for the removable cleaning head. Hoffman does not disclose having a cleaning head surface area greater than  $6.25 \text{ cm}^2$  or that the vibration is ultrasonic.

Center discloses all elements above, including the teaching that ultrasonic cleaning is a known and beneficial means for cleaning objects (Column 1 Lines 16-29).

It would have been obvious to one of ordinary skill in the art to construct a cleaning head for a sonic surface cleaner that is used for a cleaning an oven, polishing furniture, cleaning a bathroom (Column 3 Lines 19-29) to have a cleaning head surface area greater than  $6.25 \text{ cm}^2$  because it would be desirable to have a larger cleaning surface area to reduce the time it takes to clean an area, to reduce the human effort in cleaning a large surface, and because it is most efficient for cleaning a large area. Further, it would have been obvious for one of ordinary skill in the art to modify Hoffman

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by using ultrasonic means rather than vibration for cleaning objects. Also, MPEP 2144.04 IV A states "In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device."

8. Claims 33-35, 39, and 42-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bock, USPN 5,369,831 (herein '831).

'831 discloses a therapeutic ultrasonic toothbrush that comprises a housing (Figure 1), a gripping means (Figure 1 (22)), a cleaning head (Figures 1-3 (32)) that is adapted to be removably mounted to the housing (Figure 2; Column 3 Line 6), a transducer means mounted in the housing for oscillating (Figure 1 (28); Column 3 Lines 10-18), and a power supply means which is mounted in the housing (Figure 1 (24)). The gripping means is at a proximal end while the cleaning head is at a distal end (Figures 1-3). The transducer means has an average oscillating frequency of from about 1000 Hz to about 100 kHz, since ultrasonic refers to subsonic, sonic, or ultrasonic which (from definitions previously stated) fall into the range of about 1000 Hz to about 100 kHz (see Column 2 Lines 66-68). The cleaning head is in the form of bristles (Figures 1-3 (34)). The device is adapted to function while at least partially immersed in an aqueous environment since it is in the form of a toothbrush and is used in the oral cavity (Column 5 Lines 59-64). There is a first and second housings, with the

transducer means in the second housing, the second housing being more towards the distal end, and the power supply means in its own housing towards the proximal end. '831 does not disclose having a cleaning head surface area greater than  $6.25 \text{ cm}^2$ .

It would have been obvious to one of ordinary skill in the art to have a cleaning head surface area greater than  $6.25 \text{ cm}^2$ . Applicant has not disclosed that having a cleaning head surface area greater than  $6.25 \text{ cm}^2$  provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with cleaning soiled food off of a surface since it cleans soiled food from teeth. Also, MPEP 2144.04 IV A states "In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device."

9. Claims 33-35, 39, and 42-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bock, USPN 5,546,624 (herein '624).

'624 discloses a therapeutic ultrasonic toothbrush that comprises a housing (Figure 1), a gripping means (Figure 1 (22)), a cleaning head (Figures 1-3 (32)) that is adapted to be removably mounted to the housing (Figure 2; Column 3 Line 6), a transducer means mounted in the housing for oscillating (Figure 1 (28); Column 3 Lines 10-18), and a power supply means which is mounted in the housing (Figure 1 (24)).

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The frequency is 1.6 MHz (about 100 kHz, see Column 8 Lines 43-46). Further, the transducer means has an average oscillating frequency of from about 1000 Hz to about 100 kHz, since ultrasonic refers to subsonic, sonic, or ultrasonic which (from definitions previously stated) fall into the range of about 1000 Hz to about 100 kHz (see Column 3 Lines 51-55). The gripping means is at a proximal end while the cleaning head is at a distal end (Figures 1-3). The cleaning head is in the form of bristles (Figures 1-3 (34)). The device is adapted to function while at least partially immersed in an aqueous environment since it is in the form of a toothbrush and is used in the oral cavity (Column 5 Lines 59-64). There is a first and second housings, with the transducer means in the second housing, the second housing being more towards the distal end, and the power supply means in its own housing towards the proximal end. '624 does not disclose having a cleaning head surface area greater than  $6.25 \text{ cm}^2$ .

It would have been obvious to one of ordinary skill in the art to have a cleaning head surface area greater than  $6.25 \text{ cm}^2$ . Applicant has not disclosed that having a cleaning head surface area greater than  $6.25 \text{ cm}^2$  provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with cleaning soiled food off of a surface since it cleans soiled food from teeth. Also, MPEP 2144.04 IV A states "In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative

dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device.”

10. Claims 53, 54, 57, and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Center, USPN 5,311,632.

Center discloses all elements regarding the device as stated above however does not disclose instructions for using the product.

It would have been obvious for one of ordinary skill in the art to provide operating instructions as it well known in marketing and business to provide instructions for use of a product to protect the buyer and user.

#### ***Applicants Arguments***

11. In the response of 17 May 2004, Applicant argues that:

A. FR '562 does not teach or suggest that the cleaning device includes a retaining means for removably retaining tableware.

B. Applicants disagree of the assertion that the area of the cleaning head is 6.25cm squared based on a finger of Sharp defining a scale to determine a size of the device. Sharp does not teach or suggest the specific limit of a minimum cleaning head surface area.

C. Sharp does not teach or suggest a cleaning head adapted to be removably mounted to the housing.

D. Center does not suggest either expressly or inherently a cleaning head which rests on a surface greater than about 6.25 cm squared.

E. Sawyer does not utilize ultrasonic energy having a transducer means having an average oscillating frequency from about 1000 Hz to about 100 kHz.

F. Hoffman does not teach or suggest an ultrasonic cleaning device.

G. Bock '831 does not teach or suggest either expressly or inherently surface area of a cleaning head which having a surface greater than about 6.25 cm squared.

H. Bock '624 does not teach or suggest either expressly or inherently surface area of a cleaning head which having a surface greater than about 6.25 cm squared.

I. Center does not include or suggest instructions for using.

J. Center does not include a transducer means having an average oscillating frequency of from about 1000 Hz to 100 kHz.

### ***Response to Arguments***

12. Applicant's arguments A-J filed 29 September 2003 have been fully considered but they are not persuasive.

A. The device of '562 includes the entirety of the invention as shown in Figures 1-2 (particularly Figure 2), including a retaining means for retaining tableware (6.)

B. For the reasons stated above, it is obvious for a cleaning head to have a surface area greater than 6.25 cm<sup>2</sup>. Further, In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device. See



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MPEP 2144.04 (IV)A. The finger shown in the drawings of Sharp may not necessarily have a surface area greater than  $6.25 \text{ cm}^2$ , however it is not clear how the surface area of Sharp would perform differently than the Applicant's own surface area. The Applicant has not stated the importance of requiring the surface area to be greater than  $6.25 \text{ cm}^2$ . Therefore, it would have been obvious for the cleaning head to have a surface area greater than  $6.25 \text{ cm}^2$ .

C. Sharp does teach a cleaning head adapted to be removably mounted to the housing, since a friction fit between pieces has been disclosed (Column 2 Lines 35-41). Further, In re Dulberg, 289 F.2d 522, 523, 129 USPQ 348, 349 (CCPA 1961) (The claimed structure, a lipstick holder with a removable cap, was fully met by the prior art except that in the prior art the cap is "press fitted" and therefore not manually removable. The court held that "if it were considered desirable for any reason to obtain access to the end of [the prior art's] holder to which the cap is applied, it would be obvious to make the cap removable for that purpose."). See MPEP 2144.04 (V) C.

D. For the reasons stated above, it is obvious for a cleaning head to have a surface area greater than  $6.25 \text{ cm}^2$ . Further, In Gardner v. TEC Systems, Inc., 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device. See MPEP 2144.04 (IV)A. It is not clear how the surface area of Center would perform

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differently than the Applicant's own surface area. The Applicant has not stated the importance of requiring the surface area to be greater than  $6.25 \text{ cm}^2$ . Therefore, it would have been obvious for the cleaning head to have a surface area greater than  $6.25 \text{ cm}^2$ .

E. Sawyer does utilize ultrasonic energy having a transducer means having an average oscillating frequency from about 1000 Hz to about 100 kHz. Examiner reminds the Applicant that although the Applicant's device is claimed to be "ultrasonic", the range claimed falls outside of frequencies of ultrasonic devices. The range that is presently claimed covers sonic frequencies as well. See above.

F. Examiner reminds the Applicant that although the Applicant's device is claimed to be "ultrasonic", the range claimed falls outside of frequencies of ultrasonic devices. The range that is presently claimed covers sonic frequencies as well. See above.

G. For the reasons stated above, it is obvious for a cleaning head to have a surface area greater than  $6.25 \text{ cm}^2$ . Further, In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device. See MPEP 2144.04 (IV)A. It is not clear how the surface area of Bock '831 would perform differently than the Applicant's own surface area. The Applicant has not stated the

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importance of requiring the surface area to be greater than  $6.25 \text{ cm}^2$ . Therefore, it would have been obvious for the cleaning head to have a surface area greater than  $6.25 \text{ cm}^2$ .

H. For the reasons stated above, it is obvious for a cleaning head to have a surface area greater than  $6.25 \text{ cm}^2$ . Further, In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device. See MPEP 2144.04 (IV)A. It is not clear how the surface area of Bock '624 would perform differently than the Applicant's own surface area. The Applicant has not stated the importance of requiring the surface area to be greater than  $6.25 \text{ cm}^2$ . Therefore, it would have been obvious for the cleaning head to have a surface area greater than  $6.25 \text{ cm}^2$ .

I. It would have been obvious for one of ordinary skill in the art to provide operating instructions as it well known in marketing and business to provide instructions for use of a product to protect the buyer and user.

J. The device of Center is ultrasonic (see title) and has an oscillating frequency of *about* 100kHz, (10-20MHz, Column 3 Lines 61-63).

***Conclusion***

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C Cole whose telephone number is (571) 272-1272. The examiner can normally be reached on Monday-Thursday, 7:30am - 5pm, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J Warden can be reached on (571) 272-1281. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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LCC  
LCC

28 June 2004

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Terrence M. Hall  
Patent Attorney